



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

2007

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/930,120	08/14/2001	Ken Hanscom	Q00-1027-US1 / 11198.70	9955	
7590	09/14/2006	EXAMINER			
RIVERA, WILLIAM ARAUZ					
		ART UNIT	PAPER NUMBER	3654	

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/930,120	HANSCOM, KEN	
	<b>Examiner</b>	<b>Art Unit</b>	
	William A. Rivera	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 February 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-35 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-35 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

—  
A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

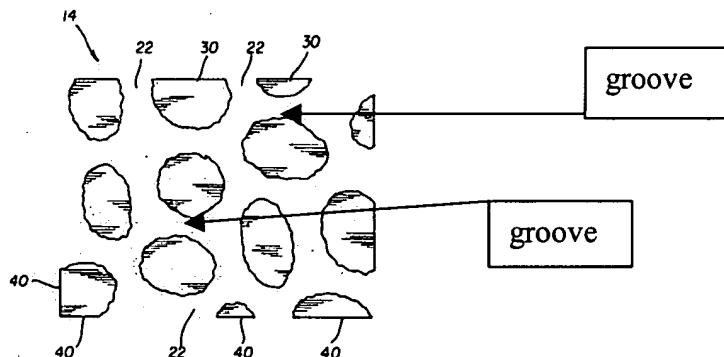
Claims 1-4, 10, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hikita (U.S. Patent No. 6,427,941).

With respect to Claims 1-4 and 10, Hikita, Figure 1, teaches a guide assembly, the guide assembly comprising: a rotatable first roller 20 including a perimeter surface, a circumference, a longitudinal axis and a groove 24 disposed into the perimeter surface, the groove having a groove length that is less than the circumference; wherein the first roller includes a plurality of spaced-apart grooves, each of the grooves having a groove length that is less than the circumference; wherein the grooves are aligned substantially parallel to the circumference.

With respect to Claims 26-27, the method described in these claims would inherently result from the use of the guide roller of the Hikita as advanced above.

Claims 1-4, 10, 14-15, 20-21, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Stewart et al (U.S. Patent No. 6,436,191).

With respect to Claims 1-4, 10, and 14-15, 20-21, Stewart et al, Figure 1, teaches a guide assembly, the guide assembly comprising: a rotatable first roller 14 including a perimeter surface, a circumference, a longitudinal axis and a groove (space between plateau 30) disposed into the perimeter surface, the groove having a groove length that is less than the circumference; wherein the first roller includes a plurality of spaced-apart grooves, each of the grooves having a groove length that is less than the circumference; wherein the grooves are aligned substantially parallel to the circumference; wherein the grooves are semi-randomly distributed on the perimeter surface; the groove having a groove depth that varies along the length of the groove (see Fig. 3).



With respect to Claims 26-27, the method described in these claims would inherently result from the use of the guide roller of Stewart et al as advanced above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 10, 12-13, 26-27, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saliba et al (U.S. Patent No. 6,427,934) in view of Sawano et al (Japanese Patent No. 10-106074).

With respect to Claims 1-4, 10, and 12-13, Saliba et al, Figure 1, teaches a tape drive 100 including a take-up reel 300 and a head assembly 104, the guide assembly comprising a rotatable first roller 102 including a perimeter surface, a circumference, a longitudinal axis. Saliba et al teach all the elements of the guide roller except for a groove. However, Sawano et al, Figures 1-3, teach a groove disposed into the perimeter surface, the groove having a groove length that is less than the circumference. It would have been obvious to one of ordinary skill in the art to provide Saliba et al with a groove on the guide roller, as taught by Sawano et al, for the purpose of controlling dynamic air entrainment between the roller surface and the magnetic tape.

With respect to Claims 26-27 and 30-32, the method described in these claims would inherently result from the use of the tape drive with guide rollers of Saliba et al in view of Sawano et al as advanced above.

Claims 14-15, 20-22, 24, 28-29, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saliba et al (U.S. Patent No. 6,427,934) in view of Sawano et al (Japanese Patent No. 10-106074) and further in view Stewart et al (U.S. Patent No. 6,436,191).

With respect to Claims 14-15, 20-22, 24, 28-29, and 34, teaches all the elements of the roller. Figures 2 and 3 of Sawano et al would appear to teach a groove that varies but it is not clear. However, Stewart et al, Figure 3, teach grooves that vary along their length. As such, it would have been obvious to one of ordinary skill in the art to provide Saliba et al in view of

Sawano et al that vary along their length, as taught by Stewart et al, for the purpose of allowing the air to travel both axially and circumferentially along the roller to escape from between the roller and the magnetic tape.

Claims 5-9, 11, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saliba et al in view of Sawano et al as applied to claims 1-4, 10, 12-13, 26-27, 30-32 above.

With respect to Claims 5-9, 11, 33, and 35, Saliba et al in view of Sawano et al are advanced above. Saliba et al in view of Sawano et al do not mention the particular dimensions of the grooves. However, it would have been obvious to one of ordinary skill in the art, as determined through routine experimentation and optimization, to dimension the grooves of Saliba et al in view of Sawano et al as specified in Claims 5-9, 11, 33, and 35 because one of ordinary skill would have been expected to have routinely experimented to determine the optimum dimensions for a particular use.

Claims 16-19, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saliba et al in view of Sawano et al and Stewart et al as applied to claims 14-15, 20-22, 24, 28-29, and 34 above.

With respect to Claims 16-19, 23, and 25, Saliba et al in view of Sawano et al and Stewart et al are advanced above. Saliba et al in view of Sawano et al and Stewart et al do not mention the particular dimensions of the grooves. However, it would have been obvious to one of ordinary skill in the art, as determined through routine experimentation and optimization, to dimension the grooves of Saliba et al in view of Sawano et al as specified in Claims 16-19, 23, and 25 because one of ordinary skill would have been expected to have routinely experimented to determine the optimum dimensions for a particular use.

Claims 5-9, 11-12, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikita as applied to claims 1-4 and 10 above or Stewart et al as applied to claims 1-4, 10, 14-15, 20-21 and 26-27 above.

With respect to Claims 5-9, 11, and 35, Hikita or Stewart et al are advanced above. Hikita or Stewart et al do not mention the particular dimensions of the grooves. However, it would have been obvious to one of ordinary skill in the art, as determined through routine experimentation and optimization, to dimension the grooves of Hikita or Stewart et al as specified in Claims 5-9, 11, and 35 because one of ordinary skill would have been expected to have routinely experimented to determine the optimum dimensions for a particular use.

With respect to Claims 12, Hikita or Stewart et al are advanced above. Hikita or Stewart et al do not mention the use of a second roller. However, it would have been obvious to one of ordinary skill in the art to provide a second roller since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

#### ***Response to Arguments***

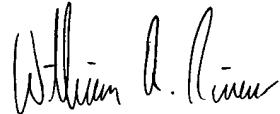
Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William A. Rivera whose telephone number is 571-272-6953. The examiner can normally be reached on Monday to Thursday - 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**WILLIAM A. RIVERA  
PRIMARY EXAMINER**

September 12, 2006